In response to the Notice to Comply with Requirements for Patent Applications Containing Nucleotide Sequence and or Amino Acid Sequence Disclosures, dated 21 June 2001, Applicants provide herewith an initial CRF, as requested in the Notice.

Applicants further submit a substitute paper copy of the Sequence Listing as provided under 37 C.F.R. §1.825 to update the Sequence Listing and to correct minor typographical errors uncovered by Applicants during the preparation of this paper. Specifically, Applicants have amended the "General Information" of the Sequence Listing to record the assigned "Current Application Number", and to delete the optional "Software" data entry. Applicants have also corrected typographical errors, replacing "gly" with "Gly,"; inserting a comma between "Leu" and "Pro"; and replacing "Ph" with "Phe" and "Net" with "Met" (as demarcated on Mark-up sheets 1, 2, and 3, respectively, provided herewith). These amendments cure obvious typographical errors. No new matter is introduced by these amendments.

As required under 37 C.F.R. §1.825(b) and §1.821(e), Applicants provide herewith the Sequence Listing in CRF. Applicants further provide herewith statements required under 37 C.F.R. §1.821(f) and (g) that the paper copy and computer readable form of the Sequence Listing are the same in content, and contain no new matter.

In view of the foregoing amendments and remarks, Applicants believe that their application is in compliance with the requirements for patent applications containing nucleotide sequence and/or amino acid sequence disclosures, and is in condition for allowance. Examination of the present application on the merits and allowance of the pending claims are, therefore, respectfully requested.

Respectfully submitted,

Leon R. Yankwich; Registration No. 30,237

Kenneth P. Zwicker, PhD; Registration No. 43,310

Attorneys for Applicants

YANKWICH & ASSOCIATES

130 Bishop Allen Drive

Cambridge, Massachusetts 02139

telephone: (617) 491-4343 telefax: (617) 491-8801

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Asst. Commissioner for Patents, Washington, D.C. 20231 on the date indicated below.

cly 23, 2001

Stephanie L. Leicht



AMENOMENT BY SOSTRUCTION TO REPLACE UNDER 37 C.F.R. §1.825: VERSION WITH MARKINGS TO SHOW CHANGES MADE

TENNETH COTTON

```
. \gamma_{\rm c} \approx \pi^{\rm c} in this contribute
       Ligation, Pubert d

    1192 P.BULIW PERTINES FOR CARSINGEMBRYOUTS ANTIGEN. CHA

-18 > Jequence Listing DYX-016.0 US
$(1405 \ \underline{03.097541,345}] \ [\not yet assigned)] < 141 < 7000-04-03
[<12 - Patentin Ver. 2.1]
1210. 1
13112 16
2212: PRT
4213: Artificial Sequence
 (223) Description of Artificial Sequence: CEA binding
       polypeptide
1221: VARIANT
<22225 (1)
<2%30 Xaa is Asn, Asp or is absent
<2.210 VARIANT
(222) (2)
(2.13) Maa is Trp
ā..... ∜APIANT
tā.020 (3)
<223: Xaa is Asp, Phe or Val
<2.201
<221> VARIANT
<2221-15)
<223: Xaa is Asn, Glu or Met
$2F1> VARIANT
+F17> F1
%3239 Waa is Asn, Leu, Met or Phe
NAČE
SEŽITA DAFIANT
Hala is Asp. Gly, Ile, Lys, Phe or Thr
7.7.7
7.71 - VAPIANT
8.7.28 - $.
collection was is Ala, Gir, [gly] Gly, Lys or Thr
```

```
TO THE LABOR AND ARRAY A
   TABLE

THE MARIANT

FOLIA TIES

FULLE Means Bin, Let or Gip
   <7:20>
*221> VARIANT
<8:22> '11)
<27:3> Xaa is Ala, Trp or Tyr
     <22.0>
<121> VARIANT
     File of Value of Ala, Gly, His, Phe, Thr or Val
     1221.5
     <221> VARIANT <222> (14)
      <223> Xaa is Asn, Gln, Phe, Ser or Val
      <221: VARIANT
<222> (15)
<223> Maa is Arg, Leu_ Pro or Ser
        <2.205
      <221) VARIANT
<222 (16)
<223: Xaa is Leu, Ser, Trp or Tyr
        4416. 1
        Xaa Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Cys Xaa Xaa Xaa
         <210 - 2
        <210    2
<211    16
<212    PRT
<213    Artificial Sequence</pre>
         FALL'S Description of Artificial Sequence: family of
                                   preferred OFA binding moieties
         FLOTE VARIANT
FLOTE III
FLOTE Kaa is Ash or Age
           - ... ARINT
```

```
to Kaaro [in] <u>in</u>, Met, ioo a Am
 essite Xaars Adj, Edy, Tie, Tys, Americ Inc
Harris Haaris Ard, Ash, Asp, Min, Bryon Trp
+ 1,27 + VARIANT
+ 2,27 + VARIANT
+ 1,27 + 1,27
-225 - Maa is Ala, Gly, His, Fhe, Thr, Tyr or Val
 1. 7 - Mara Ly Ary, Deu, Pro or Car
-223> Xaa is Leu, Ser, Trp or Tyr
+416+2
Man Trp Val Cys Glu Maa Maa Lys Maa Glr. Trp Maa Cys Ast. Maa Maa
                                       16
6.7 + 7
+.11 + 17
+178 + PBT
+ 2.3 * Artitidial Sequence
*INBA Description of Artifloial Sequence: CEA binding
     . o-e-p
(500)
- 111 - MARIANT
Touch was S Amn, 1.2 br Mot
Harris Harris Astr. Let. [Not.] Med or the
Hills - Man is Asp, Aly, 110, Lys, Fhe or Thr
```